

ity of premature artificial labor does not fall below these figures.

The latest treatment of narrow pelvis, as now taught and practiced in some of the clinics of Germany and France, is indeed much more simple, uniform and apparently far less dangerous to both mother and child. It consists of the expectant method—spontaneous labor—of hebosteotomy, and in rare instances, of Cesarian section. In this country Cesarian section is performed in preference to pubiotomy, because the latter is regarded as dangerous and unsatisfactory. While the after-treatment of these cases demands extra care, it is not as difficult as the symphyseotomy of the past. Division of the pelvis does not implicate the peritoneum, hence is less dangerous than Cesarian section. Those who have performed hebosteotomy most frequently claim that the danger of hemorrhage and infection is very small, that union of the bone, as a rule, takes place promptly, and when this does not occur, ligamentous union follows, which is a positive advantage because it often renders spontaneous labor possible in subsequent pregnancies and does not interfere with locomotion, and the after-care of the patient is not as difficult as is generally believed.

If hebosteotomy proves to be what Doederlein, Zweifel, Pinard, Bumm and others claim for it, then the difficulty of selecting one of the many compromise operations in a given case will cease to exist, and the mental torture and mortification of the obstetrician when, in the absence of success, the question arises, "Was the right thing done?" will belong to the past. This will indeed be a great relief to the obstetrician when he considers the indefiniteness with which the indications for the compromise operations have been stated by the writers on obstetrics, no two of whom agree.

Everything considered, it would appear that the time has come when the expectant spontaneous labor, hebosteotomy, and in very

rare instances, Cesarian section, will take the place of craniotomy, induction of premature labor, prophylactic version and the high forceps in the treatment of narrow or contracted pelvis. The thousands of cases thus far treated with the new method show that spontaneous labor occurs in eighty per cent., with the mother uninjured and the child living; fifteen per cent. being delivered with the aid of hebosteotomy, and five per cent. by Cesarian section. These magnificent results prove the wisdom of the expectant treatment of narrow pelvis; and division of the bony pelvis and Duhrssens operation, while done in the interest of the child, are strictly scientific and practical, and are of a life-saving character to the mother. Let us hope that the large number of compromise operations, including balloon and metal dilation, will be abandoned for the expectant or spontaneous method, and the two complete operations with definite indications—hebosteotomy and Cesarian section. Vaginal hysterotomy will take the place of accouchment force.

G. C. T.

ARTERIOSCLEROSIS OF THE UTERUS.

(Chas. M. Reese, M.D., *American Journal of Obstetrics*, November, 1908.)

Under the above title, Dr. Reese calls attention to a pathological change in the walls of the uterine arteries, which is an etiological factor in profuse, uncontrollable hemorrhage from the uterus of greater clinical importance than has generally been observed. He reports a case in a woman fifty years of age, mother of five children, whose general health has always been good. Menstruation had been regular until she was forty-five years of age, when they ceased abruptly. One year afterward, bleeding from the uterus appeared at irregular intervals of three or four months. These would occasionally be

profuse. Hysterectomy was performed. The uterus was found to be slightly enlarged, gave the impression of being unusually hard, and the arteries were very tortuous and prominent. The vessels were so brittle they would not support a ligature, and when an artery was grasped with hemostats a segment of the vessel would come away in the bite of the forceps. Hemorrhage was profuse and difficult to control. Operation was prolonged and patient left table showing pronounced shock and anemia. Every possible expedient to bring about reaction was resorted to, but she died within two hours from the beginning of the operation. Microscopical examination was not made. Microscopical findings demonstrated the facts. The uterus was hard, and the blood vessels gave the impression of segments of a chalky tube held together by an outer coating of elastic fiber, so extensively infiltrated were all the arterial coats with calcareous deposits. There was no evidence of a general arteriosclerosis.

Dr. Reese reports two other cases of the same condition.

When we recall the muscular arrangement of the uterus, and remember the fact that this organ is subjected to the most radical structural changes during the life of a child-bearing woman of any organ in her body, offering at one time resistance to the blood supply, and again relaxation which admits of easy access of blood, the arteries alternately dilating and contracting, and with this process more or less frequently repeated, truly a condition is obtained which is most favorable for the development of a localized arteriosclerosis. The

sclerosed vessels become so weak that they no longer are capable of standing the blood pressure, and give away with hemorrhages from the uterus, which may be sufficient to cause the death of the woman, and certainly to so deplete her that permanent invalidism is produced. Curettement, except for its immediate effect, increases the liability to bleeding. All preparations of ergot increase the hemorrhage by raising the arterial tension of the inelastic vessels.

A diagnosis of arteriosclerosis of the uterus is difficult to make, and can only be made where it is possible to exclude every other cause of hemorrhage, and by microscopical examination of scrapings from the uterus, in which sclerosed capillaries are found, or finally from sections of such a uterus after its removal.

Arteriosclerosis, as a definite cause of hemorrhage from the uterus, occurring in women between the ages of forty and fifty and among those who have borne children, is of greater importance than has generally been determined.

In a fair proportion of cases the hemorrhages from the uterus are in themselves sufficient to endanger the life of the woman, and can be made to yield only to hysterectomy. When the diagnosis is uncertain even after examination of a section of the cervix and scrapings from the uterus, which show no evidence of malignancy, in women between the ages of forty and fifty, who have borne children, and suffer with frequently recurring hemorrhages, hysterectomy is justified.

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